



# SAFETY DATA SHEET

Prepared to U.S. OSHA, CMA, ANSI, Canadian WHMIS Standards, Australian WorkSafe, Japanese Industrial Standard JIS Z 7250:2000, and European Directives

## 1. PRODUCT IDENTIFICATION

**TRADE NAME (AS LABELED):**

**SYNONYMS:**

**CAS#:**

**PRODUCT USE:**

**CHEMICAL SHIPPING NAME/CLASS:**

**U.N. NUMBER:**

**MANUFACTURER'S NAME:**

**DISTRIBUTOR'S NAME:**

**ADDRESS:**

**EMERGENCY PHONE:**

**BUSINESS PHONE:**

**DATE OF PREPARATION:**

**DATE OF REVISION:**

**DATE OF REVIEW:**

Chromium (III) Oxide, *Green*

Chromium (III) Oxide; Chromic Oxide; Chrome Oxide Green

1308-38-9

Various uses

Chromium (III) Oxide – **Non-Regulated**

NA

Various Manufacturers

**Hunter Chemical LLC**

220 Commerce Drive, Suite 405, Fort Washington, PA 19034

(800) 424-9300 (CHEMTREC)

(215) 461-1900

November 18, 2010

October 23, 2013

October 23, 2013

## 2. HAZARD IDENTIFICATION

**EMERGENCY OVERVIEW:** Warning!

**Product Description:** This product is a Light to Dark Green Crystalline solid with no odor.

**Health Hazards:** Harmful if swallowed or inhaled. Causes irritation to skin, eyes and respiratory tract.

**Flammability Hazards:** Non-Flammable product.

**Reactivity Hazards:** This product is not reactive.

**Environmental Hazards:** Release of the product is not expected to cause adverse effects to the aquatic environment.

**Emergency Recommendations:** Emergency responders must have personal protective equipment and fire protection appropriate for the situation to which they are responding.

**EU LABELING AND CLASSIFICATION:** This product meets the definition of a hazardous substance or preparation according to EU Regulations (EC) No 1272/2008.

EC# 215-160-9 is not classified in the Annex I of Directive 67/548/EEC

**COMPONENT(S) DETERMINING HAZARD:**

Chromium (III) Oxide

**GHS CLASSIFICATIONS:**

Skin Sensitization Category 1

Skin Irritation Category 3

Eye Irritation Category 2B

**SIGNAL WORD:** Warning



**HAZARD STATEMENT:**

H316 May cause skin irritation

H317 May cause an allergic skin reaction

H320 May cause eye irritation

**PREVENTION STATEMENT:**

P202 Do not handle until all safety precautions have been read and understood

P261 Avoid breathing dust/fume/gas/mist/vapor/spray

P272 Contaminated work clothing should not be allowed out of the workplace

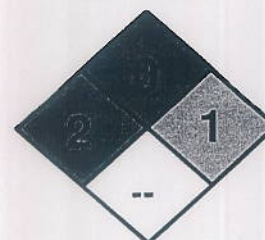
P280 Wear protective gloves/protective clothing/eye protection/face protection

P281 Use personal protective equipment as required

HAZARDOUS MATERIAL IDENTIFICATION SYSTEM			
REACTIVITY (YELLOW) 1			
PROTECTIVE EQUIPMENT			
EYES	RESPIRATORY	HANDS	BODY
SEE SECTION 8	SEE SECTION 8	SEE SECTION 8	SEE SECTION 8
For Routine Industrial Use and Handling Applications			

HEALTH

FLAMMABILITY



REACTIVITY

OTHER

Scale: 0 = Minimal 1 = Slight 2 = Moderate  
3 = Serious 4 = Severe \* = Chronic hazard

*Rec'd 10/17/14*





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## RESPONSE STATEMENT:

P321 Specific treatment is advised – see first aid instructions  
P363 Wash contaminated clothing before reuse  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water  
P308 + P313 IF exposed or concerned: Get medical advice/attention  
P333 + P313 IF skin irritation or rash occurs: Get medical advice/attention

## HEALTH EFFECTS OR RISKS FROM EXPOSURE:

**ACUTE:** Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Inflammation of the eye is characterized by redness, watering, and itching.

**CHRONIC:** Prolonged or repeated skin contact may cause sensitization dermatitis and possible destruction and/or ulceration. Repeated inhalation may cause chronic bronchitis. A review of studies conducted over 100 years showed no conclusive evidence for a cancer hazard among workers exposed to aerosols formed by chromium metal or Chromium (III) compounds. The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence in humans or experimental animals for the carcinogenicity of Chromium (III) compounds. The overall evaluation concluded that Chromium (III) compounds are not classifiable as to their carcinogenicity to humans.

## 3. COMPOSITION AND INFORMATION ON INGREDIENTS

Hazardous Ingredients:	WT%	CAS#	EINECS #	Hazard Classification	Risk Phrases
Chromium (III) Oxide	90 - 100%	1308-38-9	215-160-9	[Xi] Irritant	R36/38; R40
Balance of other ingredients is less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).					None

NOTE: ALL WHMIS required information is included in appropriate sections based on the ANSI Z400.1-2010 format. This product has been classified in accordance with the hazard criteria of the CPR and the SDS contains all the information required by the CPR, EU Directives and the Japanese Industrial Standard JIS Z 7250: 2000.

## 4. FIRST-AID MEASURES

**SKIN EXPOSURE:** If this product contaminates the skin, begin decontamination with running water. Minimum flushing is for 5 minutes. Remove exposed or contaminated clothing, taking care not to contaminate eyes. The contaminated individual should seek medical attention if any adverse effect occurs.

**EYE EXPOSURE:** If this product enters the eyes, open contaminated individual's eyes while under gently running water. Use sufficient force to open eyelids. Remove contact lenses if worn. Have contaminated individual "roll" eyes. Minimum flushing is for 15 minutes. Contaminated individual must seek immediate medical attention.

**INHALATION:** If dusts generated by this product are inhaled, remove contaminated individual to fresh air. If necessary, use artificial respiration to support vital functions. Seek medical attention if breathing distress continues.

**INGESTION:** Routine use of this product is not expected to cause any situation which could lead to ingestion. If this product is swallowed, CALL PHYSICIAN OR POISON CONTROL CENTER FOR MOST CURRENT INFORMATION. If professional advice is not available, do not induce vomiting. Never induce vomiting or give diluents (milk or water) to someone who is unconscious, having convulsions, or unable to swallow.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:** Individuals with pre-existing skin conditions may be aggravated by exposure to this material

**RECOMMENDATIONS TO PHYSICIANS:** Treat symptoms and eliminate overexposure.

## 5. FIRE-FIGHTING MEASURES

**FLASH POINT:** Non-Flammable

**AUTOIGNITION TEMPERATURE:** Not Applicable

**FLAMMABLE LIMITS (in air by volume, %):** Lower NA Upper NA

**FIRE EXTINGUISHING MATERIALS:** Use fire extinguishing methods below:

Water Spray: Yes

Carbon Dioxide: Yes

Foam: Yes

Dry Chemical: Yes

Halon: Yes

Other: Any "C" Class





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**UNUSUAL FIRE AND EXPLOSION HAZARDS:** Not considered a fire or explosion hazard.

Explosion Sensitivity to Mechanical Impact: No

Explosion Sensitivity to Static Discharge: No

**SPECIAL FIRE-FIGHTING PROCEDURES:** Incipient fire responders should wear eye protection. Structural firefighters must wear Self-Contained Breathing Apparatus and full protective equipment. Isolate materials not yet involved in the fire and protect personnel. Move containers from fire area if this can be done without risk; otherwise, cool with carefully applied water spray. If possible, prevent runoff water from entering storm drains, bodies of water, or other environmentally sensitive areas.

## 6. ACCIDENTAL RELEASE MEASURES

**SPILL AND LEAK RESPONSE:** Proper protective equipment should be used. Stop the flow of material, if this can be done safely. Contain discharged material. For spills of solid material, sweep-up or vacuum spilled solid, minimizing the generation of dust. Place in a proper container for reclamation or disposal. Dispose of in accordance with U.S. Federal, State, and local hazardous waste disposal regulations and those of Canada and its Provinces, those of Australia, Japan and EU Member States (see Section 13, Disposal Considerations).

## 7. HANDLING and STORAGE

**WORK PRACTICES AND HYGIENE PRACTICES:** As with all chemicals, avoid getting this product ON YOU or IN YOU. Wash thoroughly after handling this product. Do not eat, drink, smoke, or apply cosmetics while handling this product. Avoid breathing dusts generated by this product. Use in a well-ventilated location. Remove contaminated clothing immediately.

**STORAGE AND HANDLING PRACTICES:** Containers of this product must be properly labeled. Empty containers should be handled with care. Store containers in a cool, dry location. Keep container tightly closed when not in use.

## 8. EXPOSURE CONTROLS - PERSONAL PROTECTION

Chemical Name	CAS#	ACGIH TLV	OSHA TWA
Chromium (III) Oxide	1308-38-9	0.5 mg/m <sup>3</sup> (As Cr Compound)	0.5 mg/m <sup>3</sup> (As Cr Compound)

**VENTILATION AND ENGINEERING CONTROLS:** Use with adequate ventilation to ensure exposure levels are maintained below the limits provided below. Use a chemical fume hood or local exhaust ventilation, and process enclosure if necessary, to control airborne dust. Ensure eyewash/safety shower stations are available near areas where this product is used.

*The following information on appropriate Personal Protective Equipment is provided to assist employers in complying with OSHA regulations found in 29 CFR Subpart I (beginning at 1910.132) or equivalent standard of Canada, or standards of EU member states (including EN 149 for respiratory PPE, and EN 166 for face/eye protection), and those of Japan. Please reference applicable regulations and standards for relevant details.*

**RESPIRATORY PROTECTION:** Maintain airborne contaminant concentrations below guidelines listed above, if applicable. If necessary, use only respiratory protection authorized in the U.S. Federal OSHA Respiratory Protection Standard (29 CFR 1910.134), equivalent U.S. State standards, Canadian CSA Standard Z94.4-93, the European Standard EN149, or EU member states.

**EYE PROTECTION:** Safety glasses or goggles are recommended. If necessary, refer to U.S. OSHA 29 CFR 1910.133, Canadian Standards, and the European Standard EN166, Australian Standards, or relevant Japanese Standards.

**HAND PROTECTION:** Use chemically-resistant gloves when handling this product. If necessary, refer to U.S. OSHA 29 CFR 1910.138, the European Standard DIN EN 374, the appropriate Standards of Canada, Australian Standards, or relevant Japanese Standards.

**BODY PROTECTION:** Use body protection appropriate for task (e.g. lab coat, overalls). If necessary, refer to appropriate Standards of Canada, or appropriate Standards of the EU, Australian Standards, or relevant Japanese Standards. If a hazard of injury to the feet exists due to falling objects, rolling objects, where objects may pierce the soles of the feet or where employee's feet may be exposed to electrical hazards, use foot protection, as described in U.S. OSHA 29 CFR 1910.136.

## 9. PHYSICAL and CHEMICAL PROPERTIES

**APPEARANCE (Physical State) and COLOR:** Light to dark green crystalline solid with no odor

**ODOR:** No odor





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**ODOR THRESHOLD:** Not Applicable  
**pH:** Not Available  
**MELTING/FREEZING POINT:** 2435°C (4415°F)  
**BOILING POINT:** Not Available  
**FLASH POINT:** Not Applicable  
**EVAPORATION RATE (n-BuAc=1):** Not Applicable  
**FLAMMABILITY (SOILD, GAS):** Not Available  
**UPPER/LOWER FLAMMABILITY OR EXLOSION LIMITS:** Not Available  
**VAPOR PRESSURE (mm Hg @ 20°C (68°F):** Not Applicable  
**VAPOR DENSITY:** Not Applicable  
**RELATIVE DENSITY:** Not Available  
**SPECIFIC GRAVITY:** 5.10  
**SOLUBILITY IN WATER:** Negligible  
**PARTITION COEFFICENT (n-octanol/water):** Not Available  
**AUTO-IGNITION TEMPERATURE:** Not Applicable  
**DECOMPOSITION TEMPERATURE:** Not Available  
**VISCOSITY:** Not Applicable

## 10. STABILITY and REACTIVITY

**STABILITY:** Stable under conditions of normal storage and use.  
**HAZARDOUS DECOMPOSITION PRODUCTS:** No information found  
**MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:** Lithium, glycerol  
**POSSIBILITY OF HAZARDOUS REACTIONS:** Will not occur.  
**CONDITIONS TO AVOID:** Incompatible materials, dust generation.

## 11. TOXICOLOGICAL INFORMATION

### TOXICITY DATA:

Chromium (III) Oxide CAS# 1308-38-9

No Data

**SUSPECTED CANCER AGENT:** Ingredients within this product are not found on the following lists: FEDERAL OSHA Z LIST, NTP, IARC, or CAL/OSHA and therefore are not considered to be, or suspected to be, cancer-causing agents by these agencies.

**CARCINOGENIC EFFECTS:** A4 (Not classifiable for human) by ACGIH, 3 (Not classifiable for human.) by IARC.

**IRRITANCY OF PRODUCT:** This product can be irritating to the skin, eyes, and respiratory system with prolonged contact.

**SENSITIZATION TO THE PRODUCT:** This product may cause allergic skin reactions.

**REPRODUCTIVE TOXICITY INFORMATION:** No reports concerning the effects of this product and its components on the human reproductive system.

## 12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

**ENVIRONMENTAL STABILITY:** When released into the soil, this material is not expected to biodegrade. This material is not expected to significantly bioaccumulate. No specific data available on this product.

**CHEMICAL EFFECT ON PLANTS, ANIMALS AND AQUATIC LIFE:** This product is not expected to be harmful to aquatic life in very low concentrations.

## 13. DISPOSAL CONSIDERATIONS

**PREPARING WASTES FOR DISPOSAL:** Waste disposal must be in accordance with appropriate U.S. Federal, State, and local regulations, those of Canada, Australia, EU Member States and Japan.





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## 14. TRANSPORTATION INFORMATION

US DOT, IATA, IMO, ADR:

**U.S. DEPARTMENT OF TRANSPORTATION (DOT) SHIPPING REGULATIONS:** This product is not classified (per 49 CFR 172.101) by the U.S. Department of Transportation.

**PROPER SHIPPING NAME:**

Chromium (III) Oxide

**HAZARD CLASS NUMBER and DESCRIPTION:**

NON-REGULATED MATERIAL

**UN IDENTIFICATION NUMBER:**

NA

**PACKING GROUP:**

NA

**DOT LABEL(S) REQUIRED:**

N/A

**NORTH AMERICAN EMERGENCY RESPONSE GUIDEBOOK NUMBER:** NA

**RQ QUANTITY:**

None

**MARINE POLLUTANT:** The components of this product are not designated by the Department of Transportation to be Marine Pollutants (49 CFR 172.101, Appendix B).

**INTERNATIONAL AIR TRANSPORT ASSOCIATION SHIPPING INFORMATION (IATA):** This product is not considered as dangerous goods.

**INTERNATIONAL MARITIME ORGANIZATION SHIPPING INFORMATION (IMO):** This product is not considered as dangerous goods.

**EUROPEAN AGREEMENT CONCERNING THE INTERNATIONAL CARRIAGE OF DANGEROUS GOODS BY ROAD (ADR):** This product is not considered by the United Nations Economic Commission for Europe to be dangerous goods.

## 15. REGULATORY INFORMATION

### UNITED STATES REGULATIONS:

**U.S. SARA REPORTING REQUIREMENTS:** The components of this product are Not subject to the reporting requirements of Sections 302, 304, and 313 of Title III of the Superfund Amendments and Reauthorization Act.

**U.S. SARA THRESHOLD PLANNING QUANTITY:** There are no specific Threshold Planning Quantities for the components of this product. The default Federal SDS submission and inventory requirement filing threshold of 10,000 lbs (4,540 kg) therefore applies, per 40 CFR 370.20.

**U.S. CERCLA REPORTABLE QUANTITY (RQ):** None

**U.S. TSCA INVENTORY STATUS:** The components of this product are listed on the TSCA Inventory or are exempted from listing.

**OTHER U.S. FEDERAL REGULATIONS:** None

**CALIFORNIA SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT (PROPOSITION 65):** Ingredients within this product are not on the Proposition 65 Lists.

### CANADIAN REGULATIONS:

**CANADIAN DSL/NDL INVENTORY STATUS:** The components of this product are on the DSL Inventory, or are exempted from listing.

**OTHER CANADIAN REGULATIONS:** Not applicable.

### CANADIAN ENVIRONMENTAL PROTECTION ACT (CEPA) PRIORITIES SUBSTANCES LISTS:

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by those regulations.

**CANADIAN WHMIS CLASSIFICATION and SYMBOLS:** Not Controlled

### EUROPEAN ECONOMIC COMMUNITY INFORMATION:

**EU LABELING AND CLASSIFICATION:** This product meets the definition of the following hazard class as defined by the European Economic Community Guidelines.

**EU CLASSIFICATION:** [Xi] Irritant

**EU RISK PHRASES:** R36/38: Irritating to eyes and skin; R40: Possible risks of irreversible effects

**EU SAFETY PHRASES:** S22: Do not breathe dust; S37/39: Wear suitable gloves and eye/face protection







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**AUSTRALIAN INFORMATION FOR PRODUCT:** The components of this product are listed on the International Chemical Inventory list.

**JAPANESE INFORMATION FOR PRODUCT:**

**JAPANESE MINISTER OF INTERNATIONAL TRADE AND INDUSTRY (MITI) STATUS:** The components of this product are not listed as Class I Specified Chemical Substances, Class II Specified Chemical Substances, or Designated Chemical Substances by the Japanese MITI.

**JAPANESE ENCS INVENTORY:** The components of this product are on the ENCS Inventory as indicated in the section on International Chemical Inventories, below.

**POISONOUS AND DELETERIOUS SUBSTANCES CONTROL LAW:** No component of this product is a listed Specified Poisonous Substance under the Poisonous and Deleterious Substances Control Law.

**INTERNATIONAL CHEMICAL INVENTORIES:**

Listing of the components on individual country Chemical Inventories is as follows:

- Asia-Pac: Listed
- Australian Inventory of Chemical Substances (AICS): Listed
- Korean Existing Chemicals List (ECL): Listed
- Japanese Existing National Inventory of Chemical Substances (ENCS): Listed
- Philippines Inventory of Chemicals and Chemical Substances (PICCS): Listed
- Swiss Giftliste List of Toxic Substances: Listed
- U.S. TSCA: Listed

## 16. OTHER INFORMATION

**PREPARED BY:** Paul Eigbrett – **(SDS Authoring PLUS)**

**DATE OF PRINTING:** October 23, 2013

The information contained herein is believed to be accurate but is not warranted to be so. Data and calculations are based on information furnished by the manufacturer of the product and manufacturers of the components of the product. Users are advised to confirm in advance of the need that information is current, applicable and suited to the circumstances of use. Hunter Chemical LLC assumes no responsibility for injury to vendee or third party person proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Furthermore, Hunter Chemical LLC assumes no responsibility for injury caused by abnormal use of this material even if reasonable safety procedures are followed.

**END OF SDS SHEET**